	United States Environmen	tal Protection Agency		Work Assignment N	umber			
EPA		on, DC 20460		5-26				
EPA	Work Ass	signment		Other	Amendm	nent Number:		
Contract Number	Contract Period 01/01	1/2011 ™ 06/30/	2016	Title of Work Assigni	ment/SF Site Nan	ne		
EP-C-11-009	Base O	option Period Number 5		FSTRAC				
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Comments: Work shall not commence on t	this Work Assignment unt	il January 1, 2016.						
Superfund	Accoun	nting and Appropriations Data	а		X	Non-Superfund		
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Work Assignment Manager Name Sham	ima Akhter		Bran	ich/Mail Code:				
			Pho	ne Number 202-	566-1341			
(Signature)		(Date)	FAX	Number:				
Project Officer Name Robert Power	<u> </u>			ich/Mail Code:				
				ne Number: 202-	564-2108			
(Signature)		(Date)		Number:				
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Performance Work Statement Contract EP-C-11-009 Work Assignment 5-26

Title: Technical and Administrative Support for Federal-State Toxicology and Risk Analysis Committee (FSTRAC) and Inland HABs Discussion Group Webinars

Work Assignment Contracting Officer's Representative (WACOR)

Shamima Akhter Health and Ecological Criteria Division (MC 4304T) Office of Water, Office of Science and Technology 1200 Pennsylvania Ave, N.W. Washington, DC 20460 Phone (202) 566-1341

E-mail: akhter.shamima@epa.gov

Alternate Work Assignment Contracting Officer's Representative (Alternate WACOR)

Lesley D'Anglada
Health and Ecological Criteria Division (MC 4304T)
Office of Water, Office of Science and Technology
1200 Pennsylvania Ave, N.W.
Washington, DC 20460
202-566-1125
danglada.lesley@epa.gov

Period of Performance: January 1, 2016 through June 30, 2016

Contract PWS: 1.3, 4.0, 5.0, 6.0

Background Information:

The mission of the United States Environmental Protection Agency's (EPA) Office of Water (OW) is to protect public health and the environment from adverse effects of pollutants (e.g., chemicals and microorganisms) in media, such as ambient water, drinking water, wastewater, sewage sludge and sediments. This work assignment (WA) provides logistical technical support for the Federal-State Toxicology and Risk Analysis Committee (FSTRAC) meetings and teleconferences. FSTRAC is a committee made up of representatives from the State/Tribal health and environmental agencies, and the U.S. Environmental Protection Agency (EPA) Headquarters and Regional personnel. FSTRAC is an integral part of our communication strategy with States for human health and ecological risks associated with water contamination. The focus of FSTRAC is to share information and to develop well-rounded, integrated approaches to risk assessment, risk management, and standard setting issues for drinking water and surface water contaminants. Webinars are conducted and teleconferences are held to discuss

planning and logistical details for the webinars, as well as discussions on ongoing FSTRAC projects. This national communication network helps develop consistent risk analyses across the country and provides states, regions, and Federal Governments access to information that can improve regulatory action and prevent duplication of effort.

The Inland HABs Discussion Group is an informal discussion group made of representatives from the State/Tribal health and environmental agencies, Federal Agencies academia and NGOs created to breech a communication gap with respect to inland HAB research, monitoring, human and ecological health risk assessment, education, and outreach. This group is led by OST, CDC and USGS and conducts two hour webinars three times a year.

Purpose

Contractor support is required to provide technical and administrative support to plan, develop and document FSTRAC telephone conferences and HABs webinars/workshop. The contractor shall provide the necessary personnel, facilities, and equipment, except when such facilities and equipment may be provided by EPA, and otherwise do all things necessary for, or incidental to providing logistic support for FSTRAC and the HABs group. This support shall include both pre- and post-meeting activity, as well as support during the meetings. Specific tasks are described below.

Required Staffing

Since the FSTRAC and HABs meetings involve technical discussions, the staff assigned to support the meeting needs to be very familiar with running these meetings and providing technical expertise for developing accurate meeting proceedings.

General Tasks

In FY 2015, FSTRAC meetings will be held as teleconferences. In this performance period, two (3) webinars and one workshop will be held either by teleconferences or in person meetings.

Task Detail:

Task 0

The contractor shall develop a work plan to address the tasks identified in this work assignment. The contractor is requested to develop a work plan following the sequence of tasks in the order listed in the work assignment.

Task 1:Pre-meeting (Materials) for one Webinar for FSTRAC and one Webinar and one Workshop on HABs

FSTRAC: One webinar is planned for this performance period. The date for this webinar is still to be determined.

HABs: Two webinars and one in person workshop are planned for this performance period. The

dates and details for this webinar and workshop are still to be determined.

The contractor shall develop for EPA approval the following materials for one FSTRAC webinar in this period (dates to be determined):

- < Preliminary Agenda/Announcements/Pre-registration
- < Final Agenda

Preliminary Agenda, Announcement and Pre-Registration

The EPA WACOR shall provide the contractor a list of items for the preliminary agenda for this webinar (approximately 2-3 hours) planned for this performance period. The dates for the webinars are to be determined. The contractor shall develop a Pre-Registration using Eventbrite and a Preliminary Agenda and announcements which shall include the FSTRAC membership listing, meeting theme, potential subjects/topics to be addressed, dates, and webinar and call in information. Agenda for the webinar will be short with no more than 3-4 speakers or presentations for this webinar.

The contractor shall provide the EPA WACOR a draft of the Preliminary Agenda, Announcement and Pre-Registration for review and approval. Based on the EPA WACOR's comments, through written technical direction, the contractor shall develop the Final Preliminary Agenda, Announcement and Pre-Registration.

This Final Preliminary Agenda, Announcement and Pre-Registration shall be QA/QC'd by the Contractor and reviewed by the EPA WACOR to assure accuracy of information and shall contain no typographical errors and sent electronically to all members and invited speakers.

The Contractor shall also provide the Preliminary Agenda, Announcement, and pre-Registration electronically to the EPA WACOR for loading onto EPA's FSTRAC web-site. The format will be determined by the EPA WACOR and conveyed to the contractor via technical direction.

Final Agenda

The EPA WACOR will provide the contractor a list of items for the final agenda. The contractor shall format the final agenda for the meeting. The Contractor shall provide the EPA WACOR a draft of the agenda for review and approval. Based on the EPA WACOR's comments, the contractor shall develop the final agenda.

The final agenda shall be QA/QC'd by the contractor to assure accuracy of information and typographical errors.

Task 2: Pre-Meeting (Activities)

Solicitation to Increase FSTRAC Membership

The contractor shall solicit both regional and state FSTRAC representatives to increase

participation and attendance at the webinar. In addition, the contractor shall update the FSTRAC membership list as new members are added and address changes are made to current members.

Expert Presenters

Some expert presenters may be recommended by EPA. In the event that EPA is unable to recommend suitable experts, the contractor shall secure expert presenters, when requested by EPA WACOR, to present their latest state-of-the-art information in their areas of expertise during the meeting. Additional experts may include representatives of States, Indian Tribes, environmental organizations, industry representatives, EPA HQ and Regional Offices, representatives of other federal agencies and others. The contractor shall contact and provide names, organizational affiliation, phone and fax numbers, email addresses and topics of interest to FSTRAC members from the additional speakers.

Meeting Registration

The contractor shall accept and record registration from webinar attendees. The contractor shall record names, addresses, organizational affiliations, phone, e-mail address and fax numbers of those who preregister for the meeting. The contractor shall provide the list of names to the EPA WACOR two weeks prior to the meeting and the final list 2 working days prior to the meeting.

Registration Kit

The contractor shall develop a Registration Kit to be e-mailed out to each attendee or provided to the attendees through an appropriate electronic format. The Kit should contain at a minimum the following items. Additional items shall be provided to the contractor through written technical direction of the EPA WACOR.

- < Speaker Handout Materials
- < Final Attendance List
- < Agenda
- < Bios of speakers

Task 3: Webinar Support (for FSTRAC and HABs webinars)

The contractor shall provide an experienced technical writer to take notes throughout the webinars to record presentations and discussions for the post-meeting report.

Task 4: Post Meeting Support (for FSTRAC and HABs webinars)

Based on actual attendance, the contractor shall develop an alphabetical final typed attendance list and send it to the EPA WACOR electronically one week following the meeting. The contractor shall deliver a draft meeting summary which should include transcript of audiotaping and the notes taken from the meeting. The EPA WACOR will review the draft summary and provide comments to the contractor. After incorporating the EPA WACOR's comments, the contractor shall distribute the draft meeting summary to the speakers for review before finalizing the meeting summary report. The contractor shall produce a final draft based on the EPA

WACOR's and the speakers written comments. The contractor shall send a copy of the final draft electronically, in the format specified, to the EPA WACOR. After receiving comments from the EPA WAM, the contractor shall finalize the Meeting Summary Report.

The contractor shall send electronically the final FSTRAC Summary Report to the FSTRAC members and guests who participated in the meeting including the EPA WACOR and speakers. FSTRAC summary reports shall be 508 compliant.

Task 5: Maintenance of Share Point Site

The contractor shall provide the FSTRAC members with access to the SharePoint site or similar hosted web page to allow them to post information that they want to share with other FSTRAC members. In addition, the contractor's SharePoint site or similar hosted web page will give FSTRAC members the capability of sending e-mail notifications to other FSTRAC members through an Alerts function. The Contractor will provide instructions to the FSTRAC members on how to post information to the SharePoint site or similar hosted web page and also on how to send e-mail alerts through the site.

Task 6: Workshop on Sampling, Analysis and Treatment of cyanobacteria and cyanotoxins in drinking water

Organize a Workshop intending to improve sampling, detection, identification, and quantification of cyanotoxins in order to provide accurate and timely information on the occurrence of cyanotoxins in freshwater systems. Drinking Water treatment plant operational processes to effectively remove toxins could also be included as well as videos of tours of drinking water treatment plants facilities. The workshop will consist of several practical sessions in the field and in the lab on field sampling, phytoplankton identification and enumeration, and instrumentation for the detection of cyanotoxins. EPA plans to use the proceedings form this workshop(s) to develop a technical guidance document for sampling and detection of cyanotoxins. Further details will be determined by the EPA WACOR and conveyed to the contractor via technical direction.

Schedule of Deliverables

Task 1: Pre-meeting materials

Preliminary Agenda and Registration 8 weeks prior to scheduled meeting date

Final Preliminary Agenda 6 weeks prior to scheduled meeting date

Final Agenda 2 weeks prior to scheduled meeting date

Task 2: Pre-Meeting Activities

Membership Solicitation Ongoing

Expert Presenters 8-12 weeks prior to scheduled meeting date

Accept and Record Registration Ongoing

Obtain Speaker Biographies Ongoing

Follow-up with Speakers Ongoing

Develop Registration Kit (and Inserts)

Two weeks prior to meeting

Preliminary Registration List Two weeks prior to meeting

Final Registration List 2 working days before the meeting

Final Registration Kit 2 working days before the meeting

Task 3: Webinar SupportTask completed on date of meeting

Task 4: Post Meeting Support

Final Attendance list One week following the meeting

Draft Meeting Summary Three weeks following the meeting

Final Meeting Summary – 508 compliant

One week following comments from EPA

WACOR

Distribution of Meeting Summary Technical Direction from EPA WACOR

Task 5: Maintenance of SharePoint site Ongoing

Task 6: Workshop on Cyanotoxins Sampling Technical Direction from EPA WACOR

Quality Control

The contractor is required to ensure good quality control on all products it produces/develops. The EPA WAM shall review products for completeness, accuracy, and consistency per the work assignment or technical direction issued. Many of the tasks identified herein can be anticipated and planned for; some are quick-turnaround.

Travel

No travel required for webinars. Travel for workshop will be determined by the EPA WACOR and conveyed to the contractor via technical direction.

Special Reporting

The Contractor shall submit a Monthly Progress Report detailing activities undertaken and completed each month with an indication of upcoming tasks to be performed and anticipated problem areas.

No single event under this work assignment is anticipated to exceed \$20,000. The contractor shall immediately notify the EPA Contracting Officer, Contract Level Contracting Officer's Representative and WACOR of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur \$20,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

EPA	Un	ited States Environn Washin	nental Protection A	Agency		Work Assignment No	umber	
EFA		Work A	ssignment			Other Amendment Number:		
Contract Number		Contract Period 01,	/01/2011 To	06/30/2	2016	Title of Work Assign	ment/SF Site Nam	е
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Work Assignment Manager Na	me Shamima	Akhter			Bra	nch/Mail Code:		
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Performance Work Statement Contract EP-C-11-009 Work Assignment 5-26 Amendment 1

Title: Technical and Administrative Support for Federal-State Toxicology and Risk Analysis Committee (FSTRAC) and Inland HABs Discussion Group Webinars

Work Assignment Contracting Officer's Representative (WACOR)

Shamima Akhter Health and Ecological Criteria Division (MC 4304T) Office of Water, Office of Science and Technology 1200 Pennsylvania Ave, N.W. Washington, DC 20460 Phone (202) 566-1341

E-mail: akhter.shamima@epa.gov

Alternate Work Assignment Contracting Officer's Representative (Alternate WACOR)

Lesley V. D'Anglada
Health and Ecological Criteria Division (MC 4304T)
Office of Water, Office of Science and Technology
1200 Pennsylvania Ave, N.W.
Washington, DC 20460
202-566-1125
danglada.lesley@epa.gov

Period of Performance: July 1, 2016 through December 31, 2016

Contract PWS: 1.3, 4.0, 5.0, 6.0

Background Information:

The mission of the United States Environmental Protection Agency's (EPA) Office of Water (OW) is to protect public health and the environment from adverse effects of pollutants (e.g., chemicals and microorganisms) in media, such as ambient water, drinking water, wastewater, sewage sludge and sediments. This work assignment (WA) provides logistical technical support for the Federal-State Toxicology and Risk Analysis Committee (FSTRAC) meetings and teleconferences. FSTRAC is a committee made up of representatives from the State/Tribal health and environmental agencies, and the U.S. Environmental Protection Agency (EPA) Headquarters and Regional personnel. FSTRAC is an integral part of our communication strategy with States for human health and ecological risks associated with water contamination. The focus of FSTRAC is to share information and to develop well-rounded, integrated approaches to risk assessment, risk management, and standard setting issues for drinking water

and surface water contaminants. Webinars are conducted and teleconferences are held to discuss planning and logistical details for the webinars, as well as discussions on ongoing FSTRAC projects. This national communication network helps develop consistent risk analyses across the country and provides states, regions, and Federal Governments access to information that can improve regulatory action and prevent duplication of effort.

The Inland HABs Discussion Group is an informal discussion group made of representatives from the State/Tribal health and environmental agencies, Federal agencies academia and NGOs created to breech a communication gap with respect to inland HAB research, monitoring, human and ecological health risk assessment, education, and outreach. This group is led by OST, CDC and USGS and conducts two hour webinars three times a year.

Purpose

Contractor support is required to provide technical and administrative support to plan, develop and document FSTRAC telephone conferences and HABs webinars/workshop. The contractor shall provide the necessary personnel, facilities, and equipment, except when such facilities and equipment may be provided by EPA, and otherwise do all things necessary for, or incidental to providing logistic support for FSTRAC and the HABs group. This support shall include both pre- and post-meeting activity, as well as support during the meetings. Specific tasks are described below.

Required Staffing

Since the FSTRAC and HABs meetings involve technical discussions, the staff assigned to support the meeting needs to be very familiar with running these meetings and providing technical expertise for developing accurate meeting proceedings.

General Tasks

In FY 2016, FSTRAC meetings will be held as teleconferences. In this performance period, two (2) webinars will be held by teleconferences.

Task Detail:

Task 0

The contractor shall develop a work plan to address the tasks identified in this work assignment. The contractor is requested to develop a work plan following the sequence of tasks in the order listed in the work assignment.

Task 1: Pre-meeting (Materials) for 2 Webinars for FSTRAC and one Webinar for HABs

FSTRAC: Two webinars are planned for this performance period. The date and details for these webinars are still to be determined.

HABs: One webinar is planned for this performance period. The date and details for this webinar

is still to be determined.

The contractor shall develop for EPA approval the following materials for three FSTRAC webinar in this period (dates to be determined):

- Preliminary Agenda/Announcements
- Final Agenda

Preliminary Agenda, Announcement

The WACOR shall provide the contractor a list of items for the preliminary agenda for this webinar planned for this performance period. The dates for the webinars are to be determined. The contractor shall provide the WACOR a draft of the Preliminary Agenda for review and approval. Based on the WACOR's comments, through written technical direction, the contractor shall develop the Final Preliminary Agenda.

This Final Preliminary Agenda shall be QA/QC'd by the Contractor and reviewed by the WACOR to assure accuracy of information and shall contain no typographical errors and sent electronically to all members and invited speakers.

The Contractor shall also provide the Preliminary Agenda electronically to the WACOR for loading onto EPA's FSTRAC web-site. The format will be determined by the WACOR and conveyed to the contractor via technical direction.

Final Agenda

The WACOR will provide the contractor a list of items for the final agenda. The contractor shall format the final agenda for the meeting. The Contractor shall provide the WACOR a draft of the agenda for review and approval. Based on the WACOR's comments, the contractor shall develop the final agenda.

The final agenda shall be QA/QC'd by the contractor to assure accuracy of information and typographical errors.

Task 2: Pre-Meeting (Activities)

Solicitation to Increase FSTRAC Membership

The contractor shall solicit both regional and state FSTRAC representatives to increase participation and attendance at the webinar. In addition, the contractor shall update the FSTRAC membership list as new members are added and address changes are made to current members.

Expert Presenters

Some expert presenters may be recommended by EPA. In the event that EPA is unable to recommend suitable experts, the contractor shall secure expert presenters, when requested by

WACOR, to present their latest state-of-the-art information in their areas of expertise during the meeting. Additional experts may include representatives of States, Indian Tribes, environmental organizations, industry representatives, EPA HQ and Regional Offices, representatives of other federal agencies and others. The contractor shall contact and provide names, organizational affiliation, phone and fax numbers, email addresses and topics of interest to FSTRAC members from the additional speakers.

Meeting Registration

EPA will develop registration through Eventbrite page. The contractor shall assist WACOR with members email addresses, Speakers handout materials, agenda and bios of speakers for the registration.

Task 3: Webinar Support (for FSTRAC and HABs webinars)

The contractor shall provide an experienced technical writer to take notes throughout the webinars to record presentations and discussions for the post-meeting report.

Task 4: Post Meeting Support (for FSTRAC and HABs webinars)

Based on actual attendance, the contractor shall develop an alphabetical final typed attendance list and send it to the WACOR electronically one week following the meeting. The contractor shall deliver a draft meeting summary which should include transcript of audiotaping and the notes taken from the meeting. The WACOR will review the draft summary and provide comments to the contractor. After incorporating the WACOR's comments, the contractor shall distribute the draft meeting summary to the speakers for review before finalizing the meeting summary report. The contractor shall produce a final draft based on the WACOR's and the speakers written comments. The contractor shall send a copy of the final draft electronically, in the format specified, to the WACOR. After receiving comments from the WACOR, the contractor shall finalize the Meeting Summary Report.

The contractor shall send electronically the final FSTRAC Summary Report to the FSTRAC members and guests who participated in the meeting including the WACOR and speakers. FSTRAC summary reports shall be 508 compliant.

Task 5: Maintenance of Share Point Site

The contractor shall provide the FSTRAC members with access to the SharePoint site or similar hosted web page to allow them to post information that they want to share with other FSTRAC members. In addition, the contractor's SharePoint site or similar hosted web page will give FSTRAC members the capability of sending e-mail notifications to other FSTRAC members through an Alerts function. The Contractor will provide instructions to the FSTRAC members on how to post information to the SharePoint site or similar hosted web page and also on how to send e-mail alerts through the site.

Schedule of Deliverables

Task 1: Pre-meeting materials

Preliminary Agenda 8 weeks prior to scheduled meeting date

Final Preliminary Agenda 6 weeks prior to scheduled meeting date

Final Agenda 2 weeks prior to scheduled meeting date

Task 2: Pre-Meeting Activities

Membership Solicitation Ongoing

Expert Presenters 8-12 weeks prior to scheduled meeting date

Accept and Record Registration Ongoing

Obtain Speaker Biographies Ongoing

Follow-up with Speakers Ongoing

Task 3: Webinar Support

Task completed on date of meeting

Task 4: Post Meeting Support

Final Attendance list One week following the meeting

Draft Meeting Summary Three weeks following the meeting

Final Meeting Summary – 508 compliant

One week following comments from

WACOR

Distribution of Meeting Summary Technical Direction from WACOR

Task 5: Maintenance of SharePoint site Ongoing

Quality Control

The contractor is required to ensure good quality control on all products it produces/develops. The WACOR shall review products for completeness, accuracy, and consistency per the work assignment or technical direction issued. Many of the tasks identified herein can be anticipated and planned for; some are quick-turnaround.

Travel

No travel required for webinars.

Special Reporting

The Contractor shall submit a Monthly Progress Report detailing activities undertaken and completed each month with an indication of upcoming tasks to be performed and anticipated problem areas.

EPA				United States Environmental Protection Agency Washington, DC 20460					Work Assi	gnment Nu	ımber	
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PERFORMANCE WORK STATEMENT CONTRACT EP-C-11-009 WORK ASSIGNMENT 5-34

Title: Support for the Clean Watersheds Needs Survey (CWNS)

Work Assignment Contracting Officer's Representative (WACOR):

Greg Gwaltney	<u>USPS Mailing Address</u>	Courier Address
Phone: (202) 564-2340	Municipal Support Division	EPA East Building
Fax: (202) 501-2397	1200 Pennsylvania Ave., NW	1201 Constitution Ave., NW
Gwaltney.gregory@epa.gov	Mail Code 4204M	Room 7225G
	Washington, DC 20460	Washington, DC 20004
	,	,

Alternate Work Assignment Contracting Officer's Representative (Alternate WACOR):

Gajindar Singh	<u>USPS Mailing Address</u>	Courier Address
Phone: (202) 564-0634	Municipal Support Division	EPA East Building
Fax (202) 501-2397	1200 Pennsylvania Ave., NW	1201 Constitution Ave., NW
Singh .Gajindar@epa.gov	Mail Code 4204M	Room 7213E
70 00	Washington, DC 20460	Washington, DC 20004

Period of Performance: January 1, 2016 through June 30, 2016

Anticipated Level of Effort (LOE): 465 Hours

Background:

EPA is required by section 516 of the Clean Water Act to make "a detailed estimate of the cost of carrying out the provisions of this Act." In order to meet this requirement, EPA conducts the Clean Watersheds Needs Survey (CWNS) every four years. From January-December 2012, states provided information about the unfunded capital projects, with associated costs, that address water quality or water-related public health problems in their states. States provided this data and the supporting documentation to EPA via the CWNS Data Entry Portal (DEP). The data is then reviewed, and approved data is compiled into the CWNS 2012 Report to Congress.

This work assignment is to provide technical and administrative contract support to complete the CWNS 2012 Report to Congress and its public release, develop the Clean Water State Revolving Fund (CWSRF) Allotment Formula Report to Congress, and plan for the next data collection. The contractor shall provide technical support to EPA under the tasks described below.

The requirements include the collection of secondary environmental measurements; therefore, a Quality Assurance Project Plan (QAPP) is required. The QAPP submitted and approved under

Contract No. EP-C-08-004, Task Order No. 65 is applicable for this Work Assignment and does not need to be resubmitted.

Task 1. Support Finalization of 2012 CWNS Report to Congress

The contractor shall support the development of the CWNS 2012 Report to Congress including:

- Providing data analysis, graphic design support, and editing support to address comments during OMB review.
- Following OMB's approval, providing final, professionally edited versions of the Report in the following formats:
 - Microsoft Word (text only)
 - o 508 compliant PDF
 - o A print ready file
 - Hard copies of the report as needed (up to 20)

EPA anticipates that the final Report to Congress will be 30-35 pages long plus 4-5 appendices.

Task 1 Deliverables:

- 1. Edits to draft language and graphics based on OMB review within 5 business days of direction from EPA
- 2. Professionally edited Report in Microsoft Word, 508-compliant PDF, and professional publication software formats within 15 business days of receiving direction from EPA.

Task 2. Support for planning for next CWNS data collection

The contractor shall support planning for future CWNS by providing expert participation in discussions about CWNS eligibility, documentation rules, data entry requirements, data review, and data entry system requirements.

Task 2 Deliverables:

1. Participation in and development of materials for future CWNS planning sessions as requested by EPA

Task 3. Participation and support of Work Group and Subcommittee meetings

The Contractor shall support and participate in calls with the Work Group and 4 Subcommittees. Prior to each call, the contractor shall provide feedback for the call's agenda. At each call, the contractor shall provide expertise on issues related to eligibility, documentation rules, data entry requirements, data system requirements, data review, outreach, and training. The contractor shall provide draft materials for discussion at the calls at the request of EPA. The contractor shall take notes and develop the draft minutes for the call.

Workgroup calls will occur monthly for 1.5 hours. Subcommittee calls will occur bi-weekly for 1 to 1.5 hours. EPA estimates that the Work Group and Subcommittees will form in early 2016 and continue through the end of contract period. For planning purposes, the contractor should assume it will take notes and develop the minutes for all of the calls.

Task 3 Deliverables:

- 1. Provide prompt feedback on draft agenda.
- 2. Participation at each call.
- 3. Provide meeting materials 2 business days prior to call.
- 4. Provide draft meeting minutes 3 business days following the call.

Task 4: Support CWNS Webinar-Based Training Sessions

The Contractor shall support webinars to provide training to states and the general public. The topics would include how to use the CWNS 2012 online data and mapping tools and or preparation for the next data collection cycle. The contractor shall develop and present about half of the material (approx. 45 min per webinar) and support the question and answer sessions. Following the webinars, the contractor draft a summary of all the questions and answers provided posed during the webinar. It will provide draft answers to questions that were not addressed during the webinar. Assume each webinar will be 1.5 hours and EPA will provide needed webinar software and phone line.

Task 4 Deliverables:

- 1. Presentation materials for webinars delivered 5 business days prior to scheduled webinar
- 2. Attendance at all scheduled webinars.
- 3. Draft question and answer document within 5 business days after the completed webinar.

SCHEDULE OF BENCHMARKS & DELIVERABLES:

Task	Item	Deliverable	Draft Date	Final Date
Task 1	Finalization of the CWNS 2012 Report to Congress	A final data set that meets the data review standards (defined in the QAPP). A written summary of the steps taken during data reconciliation and data finalization		10 business days after final corrections provided by EPA
Task 2	Support for planning for future CWNS	Participation in and development of materials for future CWNS planning sessions as requested by EPA	TBD	Within 10 business days of directions from EPA
Task 3	Participation and support for future CWNS Work Group and Subcommittee meetings	- Provide prompt feedback on draft agendaParticipation at each callProvide meeting materials -Provide meeting minutes	Minutes: 3 business days following the call.	Participation on calls: As scheduled by EPA Meeting materials: 2 business days prior to call.
Task 4	Support CWNS Webinar-Based Training Session	Presentation materials for webinars Attendance at all scheduled webinars. Draft question and answer document	Materials: 5 business days prior to scheduled webinar Q & A Document: 5 business after completed webinar	Participation in webinar: As scheduled by EPA

REPORTING

All documentation and reporting under this Task Order shall be in compliance with contract requirements. See contract clause F.2, F.3, and J.2 "List of Attachments, Number 2 - Reports of Work".

TRAVEL

All travel under this Task Order shall be in compliance with contract requirements. See contract clause H.23

CONTRACTOR IDENTIFICATION

Contractor personnel shall always identify themselves as Contractor employees by name and organization and physically display that information through an identification badge. Contractor personnel are prohibited from acting as the Agency's official representative.

The Contractor shall refer any questions relating to the interpretation of EPA policy, guidance, or regulation to the WACOR.

CONFERENCE/MEETING GUIDELINES AND LIMITATIONS

The contractor shall immediately alert the EPA WACOR to any anticipated event under the work assignment which may result in incurring an estimated \$20,000 or more cost, funded by EPA, specific to that event, meeting, training, etc. Those costs would include travel of both prime and consultant personnel, planning and facilitation costs, AV and rental of venue costs, etc. The EPA WACOR will then prepare approval internal paperwork for the event and will advise the contractor when appropriate signatures have been obtained. At that point, effort can proceed for the event. If the event is being sponsored by another EPA organization, the organization providing the planning is responsible for the approval.

QUALITY ASSURANCE SURVEILLANCE PLAN

The following performance measures will apply to work under this work assignment

Performance Requirement	Measurable Performance Standards	Surveillance Methods	Incentives/Disincentives
Management and Communications: During the performance of the Contract, the Contractor shall immediately inform EPA of any issue that may potentially impact project schedules or cost.	The Contractor shall maintain contact with contract managers (EPA CO, CL-COR and WACOR) throughout the performance of the contract and identify any issues or concerns to the appropriate EPA contract manager prior to occurrence. In cases where issues have a direct impact on project schedules and cost, the contractor shall provide options for EPA's consideration on resolving or mitigating the impacts.	EPA contract managers will allocate the time needed to discuss and address all issues identified by the Contractor. Each EPA contract manager will document and maintain a complete record of the issues, agreements and outcome. All EPA contract managers will review monthly progress reports for indicators of communications problems and will bring issues to the Contractor's immediate attention.	Any issues that impact project schedules and cost that are not brought to the attention of the appropriate EPA contract manager before occurrence will be unsatisfactory. Two or more incidents during any contract option period will be reported as unsatisfactory performance in the NIH Performance Evaluation System.
Cost Management and Control: The Contractor shall perform all work in an efficient and cost effective manner, applying cost control measures where practical.	The Contractor shall monitor, track and accurately report level of effort, labor cost, other direct cost and fee expenditures to EPA through monthly progress reports and approved special reporting requirements. The Contractor shall assign appropriately leveled and skilled personnel to all tasks, practice and encourage time management, and ensure accurate and appropriate time keeping.	The EPA Contract-Level Contracting Officer's Representative (CL-COR) will routinely meet with the Contractor's Project Manager to discuss the work progress and contract and individual work assignment level expenditures. The CL-COR shall review the Contractor's monthly progress reports and request the WACORs verification of expenditures and technical progress before authorizing invoice payments. The EPA WACOR will maintain regular contact with the Contractor's designated work assignment manager /project manager to discuss work assignment progress and expenditure. The WACOR will review the Contractor's monthly progress report and invoice and provide feedback to the CL-COR on payment.	An overrun that exceeds 4% of the total contract obligation that is the direct result of the Contractor's failure to manage and control cost will result in an unsatisfactory rating being reported to the NIH Performance System.
Technical Analyses: The Contractor shall collect and analyze data in support of the Agency decision-making.	The analyses conducted by the contractor shall be factual and defensible and based on sound science and engineering. All data shall be collected from reputable sources and quality assurance measures shall be conducted in accordance with agency requirements and any additional requirements outlined in individual work assignments. Any work requiring the contractor provided options or recommendations shall include the rationale use in selecting the option/recommendation and all other options considered.	The appropriate Contract Managers will review all analyses conducted by the Contractor and will independently consider the merit. EPA may opt to peer review analyses to further validate merit.	All analyses conducted for EPA by the Contractor must be factual and based on sound science and engineering. If after reviewing the Contractor's analysis, EPA determines that the content is not factual, legally defensible or based on sound science and engineering, The Contractor's performance will be reported as unsatisfactory in the NIH Contractor Performance System.

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PERFORMANCE WORK STATEMENT CONTRACT EP-C-11-009 WORK ASSIGNMENT 5-35

TITLE: Optimizing Stormwater/Nutrient Management: Region 1 Opti-Tool and BMP Nutrient Accounting and Tracking Tools – Development, Outreach and Technical Assistance

WORK ASSIGNEMENT CONTRACTING OFFICER'S REPRESENTATIVE (WACOR):

Mark Voorhees US Environmental Protection Agency, Region 1 5 Post Office Square, Suite 100 Boston, Massachusetts Mail Code: OEP 06-4

Phone: 617-918-1537 Fax: 617-918-0537

E-Mail: voorhees.mark@epa.gov

ALTERNATE WORK ASSIGNEMENT CONTRACTING OFFICER'S REPRESENTATIVE (Alternate WACOR):

Jennie Bridge US Environmental Protection Agency, Region 1 5 Post Office Square, Suite 100 Boston, Massachusetts Mail Code: OEP 06-2

Phone: 617-918-1685 Fax: 617-918-0685

E-Mail: bridge.jennie@epa.gov

PERIOD OF PERFORMANCE: January 1, 2016 through June 30, 2016

BACKGROUND:

During 2014 and 2015, EPA Region 1 issued work assignments to Tetra Tech, Inc., (WA 3-35 and 4-35) to develop a spreadsheet-based optimization tool for municipal stormwater managers and their consultants who are interested to identify a suite of best management practices (BMPs) that provide the most effective treatment for the least cost on a watershed basis. Work under WA 4-35 also included a task to develop BMP Accounting and Tracking tools to facilitate watershed based nutrient accounting, tracking and reporting associated with: 1) Nutrient load reduction requirements in the upcoming Massachusetts MS4 permit; and 2) Lake Champlain Phosphorus TMDL implementation in Vermont.

The user-friendly stormwater management optimization tool (Opti-Tool) will provide the means to evaluate options for determining the best mix of structural BMPs in a particular geographic area to achieve quantitative water resource goals. The tool incorporates scientifically robust model generated long term time-series of hourly runoff volume and quality concentrations, as well as regionally calibrated model input BMP performance parameters for total phosphorus (TP), total nitrogen (TN), total suspended

solids (TSS), and Zinc (Zn). The list of structural BMPs to be simulated by the tool includes LID and GI practices such as a variety of infiltration practices, bio-filtration, gravel wetlands and porous pavement.

The Opti-Tool consists of a Microsoft-Excel platform and external SUSTAIN BMP process and optimization modules. The user interacts with the Excel platform for data input, and can direct Excel to call the SUSTAIN module to estimate long term cumulative BMP performance and provide optimization at a given assessment point in the watershed. The Opti-Tool is designed for use in two modes: 1) Generalized planning level mode for conducting initial assessments and developing overall management strategies; and 2) Detailed design mode for detailed applications when site-specific data are available. Input categories include data on subwatershed area, connectivity; conduit/stream length, shape; BMP type, location, unit costs; and optimization assessment points. In the post-processing step, the tool automatically retrieves the optimization results and generates tradeoff curves between total BMP costs and the designated stormwater control targets (e.g., pollutant load reduction vs. costs). Cost-effective BMP sizing strategies for meeting control targets are processed and presented to the user in the form of depth of runoff to be treated in individual subwatersheds. Detailed information of analyzed scenarios are included in the output folder, allowing for users to look into possible alternatives to the near-optimal solutions.

The two BMP accounting and tracking tools are being developed using Microsoft-Excel platforms and are intended to standardize accounting and tracking of a variety of BMP types and their associated nutrient load reductions. The MS4 tool will also include reporting capabilities consistent with nutrient reduction related permit requirements. The Vermont tool will function as both a stand-alone tool and as an intermediary platform that will receive BMP data from a variety of databases and provide output to a larger statewide database management and reporting system.

Moving forward with WA 5-35, the Region needs to demonstrate the Opti-Tool through a case study, finalize the user manual, and pilot the Opti-Tool in different geographic settings with varying management needs. Minor refinements to the Opti-Tool shall be made based on user feedback from the pilot testing program. Similar processes are also needed for testing the MS4 accounting and tracking tool, and ultimately the Vermont BMP accounting and tracking tool which will be completed during WA 5-35.

This work assignment will support the following key areas of focus for EPA: urban stormwater, environmental justice, nutrients, integrated planning, affordability, and sustainability. Moreover, this work is necessary to assist EPA regional staff to:

- Provide local decision-makers and their consultants with an essential and credible technical tool to develop and implement technically sound and robust management plans capable of demonstrating accountable progress and compliance with permit requirements based on TMDLs that stormwater impacts and excessive nutrient loadings;
- Empower communities at the local level to optimize restoration plans (that can incorporate LID and Green Infrastructure practices) for treatment effectiveness and cost; quantify and link stormwater management actions taken in a watershed to in-stream improvements; establish reduction credits for actions taken in the context of complying with permit requirements.
- ➤ Increase the pace of efforts to prevent and abate stormwater and nutrient impacts, especially in vulnerable coastal systems such as those found on Cape Cod;
- ➤ Provide regulators with more quantifiable reasonable assurance for attaining load reductions in mixed-source TMDLs;
- ➤ Reduce threat of litigation over TMDL development and lack of progress towards water quality improvement in impaired waters;
- > Support the TMDL Vision Strategy where states identify permitting as an "alternative" to TMDLs.

PURPOSE AND OBJECTIVE:

The purpose of this project is to finalize development of the Opti-Tool, the Excel spreadsheet-based stormwater/nutrient management optimization tool, and make it ready for use by a wide range of users including municipal officials, consultants, state and EPA program staff in stormwater and nonpoint source programs, and those involved with watershed planning. The Opti-Tool will allow users to optimize a range of structural best management practice (BMP) designs for various watershed characteristics to achieve specific watershed goals, including planning and design purposes. Optimization will account for estimated costs associated with BMP removal of nitrogen, phosphorus, total suspended solids, zinc, and stormwater flow control. The tool will have the ability to develop information that can be used in the MS4 nutrient BMP accounting, tracking and reporting tool suitable for NPDES purposes. Lastly, steps will be taken to facilitate use of and increase awareness of the Opti-Tool and the track/accounting tools.

The objectives of this project are to increase stakeholder confidence in making informed choices during stormwater/nutrient management planning, and avoid litigation over both TMDLs and NPDES permits by informing watershed management practitioners on the vast array of opportunities available to address watershed flow, quality and quantity issues in the most cost effective manner. More specifically, this project will provide tools and technical assistance that will be suitable for BMP planning while considering varying BMP design elements, full nutrient removal assessment capability, tracking and reporting for stormwater permitting purposes, and support to ensure tool usability and integration with other Regional water management efforts. The ultimate goal of this project is to improve water quality and hydrologic conditions in New England waters, especially on a watershed basis and to highlight applicability and utility of the tool in vulnerable southeast New England coastal systems.

The Agency requires technical expertise to support the following project, which is designed to accomplish these goals and objectives in the New England States.

SCOPE OF WORK

Task 1 - Work Plan

The contractor shall prepare a Work Plan for EPA's approval. The Work Plan shall describe how the contractor shall accomplish each of the Tasks. The contractor shall provide qualified staff to perform the work and a Project Manager to oversee all project activities.

Deliverable: The contractor shall submit a Work Plan within **twenty calendar days** after the Work Assignment is issued to the contractor.

Task 2 – Quality Assurance Elements

The contractor shall identify all quality assurance elements that need to be addressed to successfully achieve the project's stated objectives. The quality assurance elements may be included into the Work Plan or identified and addressed in a separate document. Whichever documentation method is used, the contractor shall include the EPA identifier **RFA** #13115 Addendum 3_WA-35.

As described in the Tasks below, the final outputs of this project will depend upon secondary data. It will be critically important to ensure (and document) that all secondary data used in the modeling (e.g., rainfall data,) and data analysis be of acceptable quality. Also, it must be documented that the models or modeling approaches to be used in this project have already been well tested in other applications.

Attachment A (separate document) to this Performance Work Statement provides a check list that

identifies **quality assurance** elements that may apply to this project. The Region has identified with check marks (see check list) those elements that should be considered by the contractor as the Work Plan is prepared. The contractor should address each of the checked items and any other items in Attachment A that the contractor determines to be relevant to the project.

Deliverable: The contractor shall provide, **at the time of submitting the Work Plan**, an updated copy of the checklist with appropriate markings to identify those quality assurance elements that have been addressed in the Work Plan or in a separate document. Additionally, for those elements identified by the Region in this Work Statement (see Attachment A) as potentially being applicable to this project but which the contractor has determined are not needed, the contractor shall provide a brief explanation as to why each element is not needed for this project. These brief explanations (typically expected to be 1 to 3 sentences) can be provided directly on the check list or in a separate document.

Task 3 – Project Coordination

The Contractor will work closely with the EPA WACOR and the existing Technical Advisory Committee (TAC). The Contractor will consult the WACOR for major technical decisions, especially during the project kickoff and the final project delivery meetings. It will be the responsibility of the WACOR to provide the contractor input on behalf of the TAC in a timely manner consistent with the deliverable due dates.

Deliverables: The Contractor will maintain communication with the EPA WACOR throughout the project. The Contractor will submit monthly progress reports and host bi-weekly conference calls with the EPA WACOR.

Task 4 – Finalize Opti-Tool

The contractor will finalize the Opti-Tool in accordance with the subtasks below.

Task 4.a Final Draft Opti-Tool: The Contractor shall consider/address comments provided by the WACOR on the Draft Opti-Tool developed in WA 4-35 and prepare a Final Draft version of Opti-Tool for use in the pilot testing process outlined in Task 7. The WACOR comments on the draft version of the Opti-Tool shall be transmitted to the contractor no later than **January 22, 2016**.

Deliverables: By February 10, 2016 or within 20 days of receiving comments from the WACOR, the Contractor will submit Final Draft version of the Opti-Tool to the EPA WACOR.

Task 4.b Final Opti-Tool: The Contractor shall finalize the Opti-Tool after considering comments developed through the pilot testing process outlined in Task 7. The WACOR shall provide the Contractor with written comments and a summary of the feedback from the pilot testing process **by April 7, 2016**. The Contractor shall make minor enhancements (approximately 40 hours LOE) to the Opti-Tool based on the comments/recommendations from the pilot testing process.

Deliverables: By May 12, 2016 the Contractor will submit Final version of the Opti-Tool to the EPA WACOR.

Task 5 - Finalize User's Manual

Task 5a. Final Draft User's Manual: The Contractor shall consider/address comments provided by the WACOR on the Draft User's manual developed in WA 4-35 and prepare a Final Draft User Manual for use in the pilot testing process outlined Task 7. The WACOR comments shall be transmitted to the

contractor no later than **January 22, 2016**.

Deliverables: By February 10, 2016 or within 20 days of receiving comments from the WACOR, the Contractor will submit Final Draft Opti-Tool User's Manual to EPA WACOR.

Task 5.b Final User's Manual: The Contractor shall finalize the User's Manual after considering comments developed through the pilot testing process outlined in Task 7. The WACOR shall provide the Contractor with written comments and a summary of the feedback from the pilot testing process **by April 7, 2016**.

Deliverables: By May 12, 2016 the Contractor will submit Final version of the User's Manual to the EPA WACOR.

Task 6- Case Study/Demonstration of the Opti-Tool

The Contractor shall demonstrate the functionality of the Draft Final Opti-tool for the Bartlett Brook watershed in Vermont. The Contractor shall document the case study/demonstration in a 2-4 page fact sheet.

Deliverables: By February 28, 2016, the Contractor will submit the draft fact sheet from the Bartlett Brook watershed case study to EPA WACOR and TAC. The contractor will submit a final version of the fact sheet 30 days after receiving comments from EPA WACOR.

Task 7 - Pilot Application and Technical Support

In consultation with the WACOR and local officials, the Contractor shall provide technical support to EPA who will be working with one or two entities to pilot the Opti-Tool in a real world application. The pilot user(s) shall provide feedback on use of the tool and make recommendations for further enhancements to the tool. The EPA WACOR shall consolidate feedback from the pilot users and provide comments/recommendations to the Contractor. In accordance with Tasks 4 and 5, the Contractor shall make minor enhancements (approximately 40 hours LOE) to the Opti-Tool based on the comments/recommendations from the pilot user and finalize the User's Manual.

Deliverables:

Task 7a Technical Support: By March 31, 2016, the Contractor shall provide technical support to one or two Pilot Entities to apply the Opti-Tool to address potential permit requirements or TMDL implementation.

Task 7.b Technical Memorandum on Pilot Testing: By April 15, 2016 the Contractor shall submit a draft report on the pilot study results including a summary of feedback on the Opti-Tool as well as proposed further enhancements to be made to the tool under this WA.

Task 7.c Final Report on Pilot Testing: By April 30, 2016, the contractor shall submit a final report to WACOR summarizing the pilot application and technical support activities.

Task 8 – Finalize Nutrient BMP Accounting, Tracking and Reporting Tools

The Contractor shall finalize the development of the two nutrient BMP accounting and tracking tools developed under WA 4-35: 1) Massachusetts Nutrient BMP Accounting and Tracking Tool (BATT); and 2) Vermont Lake Champlain Nutrient Accounting and Tracking Tool. These tools will provide basic tracking, accounting, and reporting for purposes of assuring use of credible hydrologic, pollutant loading and BMP performance information to determine appropriate reduction credits for EPA Region 1 NPDES stormwater permitting purposes and for implementation actions associated the new Lake Champlain

TMDL.

The contractor will finalize the two tools in accordance with the subtasks below.

Task 8.a Massachusetts MS4 BMP Accounting and Tracking TOOL (BATT): The Contractor shall consider/address comments provided by the WACOR on the Draft BATT developed in WA 4-35 and prepare a Final BATT and User's Manual The WACOR comments on the draft version of the MA BATT shall be transmitted to the contractor no later than January 29, 2016.

Deliverables: By February 28, 2016 or within 30 days of receiving comments from the WACOR, the Contractor will submit the Massachusetts BATT and User's Manual to the EPA WACOR.

Task 8.b Vermont Lake Champlain Accounting and Tracking Tool: The Contractor shall finalize the latest version of the Vermont Lake Champlain Accounting and Tracking Tool after coordinating with WACOR, EPA Region personnel, and representatives of Vermont Department of Environmental Conservation in defining the scope of the tool to be developed under this work assignment. EPA Region 1 envisions the Vermont tool will incorporate features from both the Massachusetts BATT (see Task 8.a) and the Lake Champlain Scenario Tool previously developed by Tetra Tech for use in developing the Lake Champlain TMDL.

Deliverables: Task 8.b.1: By January 29, 2016, the Contractor will submit a draft design of the Vermont Accounting and Tracking Tool to the EPA WACOR. Task 8.b.2: By March 31, 2016 or within 45 days after receiving comments from the WACOR on the draft design of the tool, the Contractor will submit a final version of the Vermont Lake Champlain Accounting and Tracking Tool to the EPA WACOR along with a User's Manual.

Task 9 - Climate Change Assessment on Long-Term Cumulative Performance Estimates of Selected SW Controls

The Contractor shall conduct an analysis to evaluate the impacts of predicted future changes in precipitation patterns on long-term cumulative SW control performance estimates for reducing annual loadings of nutrients (TP and TN). The work under this task shall be accomplished through a combination of hydrologic/runoff quality modeling and SW control modeling as described in the following subtasks:

Task 9.a Hydrologic and Runoff Quality Modeling

Estimates of hourly precipitation and daily temperature time series have been developed for extended future periods of time to reflect potential future climate change scenarios for various regions of the United States, including the New England Region. The Contractor shall obtain future climate time series that are representative of New England for use as input to Storm Water Management Model (SWMM) models that have been developed and calibrated to represent runoff flow and nutrient quality for existing conditions in the New England Region. Specifically, the SWMM HRU models developed under WA 4-35 shall be rerun using the future climatic time series to generate Future Climate Hydrologic Response Unit (FC-HRU) time series of hourly runoff volume, total phosphorus (TP) and total nitrogen (TN) concentrations from impervious cover for three land use categories: 1) High density residential (HDR); 2) Commercial/industrial (C&I); and 3) Low Density Residential (LDR). The only changes to be reflected in FC-HRU time series will be due to the future climatic time series. All other SWMM model input parameters (e.g., build-up/wash-off related parameters) shall not be changed for the future climate scenario.

Deliverable: By January 31, 2016, the Contractor shall provide in spreadsheet format the FC-HRUs for flow, TP and TN to the WACOR.

Task 9.b BMP Performance Modeling

The Contractor shall use the future climate land used based FC-HRU time series developed under Task 9.a as input into the calibrated SUSTAIN SW control models developed under WA 4-35 to generate cumulative performance curves for average annual reductions of TP and TN for each of the GI/LID/SW structural controls identified in Table 1. The Contractor shall use the same SUSTAIN modeling approach and calibrated SW control models used to develop the existing climatic condition performance curves to develop the nutrient reduction performance curves for the future climatic conditions. Only the input times series of flow and nutrient (i.e., TP and TN) concentrations shall be changed to develop the future climate performance curves. Cumulative runoff volume reduction performance curves shall also be developed for the infiltration practice in addition to the performance curves for TP and TN, which will be developed for all of the selected BMP types. Table 1 identifies the parameters and conditions for which cumulative performance curves shall be developed for each BMP type.

Table 1: Selected BMP Types for Assessment of Effects of Future Climate Change on							
Long-term Cumulative Performance Estimates for Reducing Nutrient Loads							
BMP Type	Parameters	Land Use FC-	Specific Design	Number of			
		HRU Time Series	Features	Curves			
Infiltration System	TP, TN, Volume	HDR, C&I, LDR	Infiltration Rates 0.017, 0.52, & 1.02 inches/hour)	27			
Gravel Wetland System	TP & TN	HDR, C&I, LDR	UNHSC	6			
Enhanced Bio- Filtration w/ ISR*	TP & TN	HDR, C&I, LDR	UNHSC	6			
			Σ	39			
ISR = Internal Storage Reservoir							

Each performance curve developed for future climatic conditions shall be compared to the appropriate performance curve (matching GI/LID/SW control type, parameter, etc.) for existing climatic conditions to assess changes in estimated cumulative performances based on anticipated climate change. Also, average annual export rates for TP, TN and runoff volume shall be calculated based on the FC-HRU time series for each land use category and compared to corresponding export rates for existing conditions. The results along with the documentation of the methodology used in the analysis shall be summarized in a technical memo with comparative graphics.

Deliverables: By January 31, 2016, the Contractor shall provide a technical memo summarizing the results of the future climate change assessment on long-term cumulative performance estimates of selected SW controls.

DELIVERABLES REQUIRED AND SCHEDULE FOR COMPLETION OF TASKS

Task	Item Required	Due Date	Number of Copies and
			Format Requirements
1	Work Plan	In accordance with	In accordance with contract
		contract requirements	requirements
2	Quality Assurance checklist and	With work plan	1 in electronic format
	documentation	_	
3	A. Monthly progress reports	A. The end of every	A. 1 in electronic format
		month	

1	B. Bi-weekly conference calls	B. Every two weeks	A - 1 ' - 1
4	4.a Final Draft Opti-Tool	4.a February 10, 2016	4.a 1 in electronic format
	4.b Final Opti-Tool	4.b May 12, 2016	4.b 1 in electronic format
5	5.a Final Draft User's Manual for	5.a February 10, 2016	5.a 1 in electronic format
	Opti-Tool		
	5.b Final User's Manual for Opti-	5.b May 12, 2016	5.b 1 in electronic format
	Tool		
6	6.a Draft fact sheet for Bartlett	6.a February 28, 2016	6.a 1 in electronic format
	watershed demonstration	61 20 1 6	
	6.b Final fact sheet for Bartlett	6.b 30 days after	6.b 1 in electronic format
	watershed demonstration	receiving comments from WACOR	6.b 1 in electronic format
7	7.a Provide technical support to one	7.a March 31, 2016	7.a On-call technical
,	or two Pilot Entities to apply the	7,44 1,132 311 61, 2010	support via phone and/or
	Opti-Tool to address permit		meetings
	requirements or TMDL		
	implementation		
	71.5.6.1.1.1	7.b April 15, 2016	7.b 1 in electronic format
	7.b Draft technical memo	WACOR	
	summarizing pilot study results and Opti-Tool enhancement requests		
	Opti-1001 cimalicement requests		7.c 1 in electronic format
	7.c Final report for pilot Technical	7.c April 30, 2016	
	support for pilot testing Opti-Tool		
8	8.a Finalize Massachusetts Nutrient	8.a February 28, 2016	8.a 1 in electronic format
	BMP Accounting and Tracking Tool	or 30 days after	
	9 h 1 Dueft design of VT Lake	receiving comments from WACOR	
	8.b.1 Draft design of VT Lake Champlain Accounting and Tracking	8.b.1 January 21, 2016	8.b.1 1 in electronic format
	Tool	6.0.1 January 21, 2010	8.6.1 I in electronic format
		8.b.2 March 31, 2016 or	8.b.2 1 in electronic format
	8.b.2 Final version of VT Lake	45 days after receiving	
	Champlain Accounting and Tracking	comments from	
	Tool	WACOR	
9	9.a Provide in spreadsheet format	9.a January 31, 2016	9.a 1 in electronic format
	the FC- HRU time series	0 h January 21 2016	9.b 1 in electronic format
	9.b Provide a technical memo	9.b January 31, 2016	9.0 1 in electronic format
	summarizing the results of the		
	climate change analysis on SW		
	control performances.		

ESTIMATED LEVEL OF EFFORT:

EPA estimates 935 hours will be required to complete all tasks.

ANTICIPATED TRAVEL REQUIREMENTS

Travel for 2 persons, two days each to Boston, Massachusetts. Technical directions will be issued by the EPA WACOR within 2 weeks of the scheduled trip to clarify the specific travel dates and the number of persons required for the following tasks:

Tasks 7:

Task	Travel Destination /Purpose	Travel Destination /Purpose
7	Boston, MA/ Meetings on pilot application with Final Draft Opti-Tool and Tracking & reporting Tool	1 trip of 2 persons for two day duration each

ADDITIONAL REQUIREMENTS:

Office direct costs (ODCs) for copying, postage/courier, supplies, computer usage, and graphics are allowed.

Upon issuance of written technical direction, the Contractor shall submit for inspection of all work in progress at any time under this work assignment. The Contractor shall develop and maintain files supporting each task.

The contractor shall contact the EPA Work Assignment Contracting Officer's Representative (WACOR) and/or the Contract-Level Contracting Officer's Representative (CL-COR) by telephone to discuss any problems that may adversely affect the work on this Work Assignment. Within five (5) calendar days the contractor shall follow the phone call with a brief written explanation of the problem, including any actions already taken, and/or recommended solutions to correct the problem. Written explanation shall be made available to the EPA WACOR and the CL-COR.

CONTRACTOR IDENTIFICATION:

To avoid any perception that contractor personnel are EPA employees, the contractor shall assure that contractor personnel are clearly identified as independent contractors of EPA when attending meetings with outside parties or visiting field sites.

CONTROL REQUIREMENTS:

Organizational Conflict of Interest:

The Contractor shall warrant that, to the best of the Contractor's knowledge and belief, there are no relevant facts or circumstances which could give rise to an organizational conflict of interest, as defined in FAR Subpart 9.5, or that the contractor has disclosed all such relevant information. See contract clause 1552.209-71 Organization of Conflict of Interest.

Notification of Conflicts of Interest Regarding Personnel:

The Contractor shall immediately notify the CL-COR and the Contracting Officer of (1) any actual or potential personal conflict of interest with regard to any of its employees working on or having access to information regarding this contract, or (2) any such conflicts concerning subcontractor employees or consultants working on or having access to information regarding the contract, when such conflicts have been reported to the Contractor. A personal conflict of interest is defined as a relationship of an employee, subcontractor employee, or consultant with an entity that may impair the objectivity of the employee, subcontractor employee, or consultant in performing the contract work. See Section H.4, contract clause EPAAR 1552.209-73 Notification of Conflict of Interest.

Project Employee Confidentiality Agreement

The contractor agrees that the contractor employee will not disclose, either in whole or in part, to any entity external to the EPA or the contractor, any information or data (as defined in FAR Section 27.401) provided by the government or first generated by the contractor under this contract or any site-specific cost information without first obtaining the written permission of the EPA CL-COR.

Conference/Meeting Guidelines and Limitations

The contractor shall immediately alert the EPA WACOR to any anticipated event under the work assignment which may result in incurring an estimated \$20,000 or more cost, funded by EPA, specific to that event, meeting, training, etc. Those costs would include travel of both prime and consultant personnel, planning and facilitation costs, AV and rental of venue costs, etc. The EPA WACOR will then prepare approval internal paperwork for the event and will advise the contractor when appropriate signatures have been obtained. At that point, effort can proceed for the event. If the event is being sponsored by another EPA organization, the organization providing the planning is responsible for the approval.

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Contractor				Specify	y Section and pa	ragraph of Co	ntract SOW			
TETRA TE	CH, INC.			See	PWS					
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Project Officer Name Robert Powell							nch/Mail Cod	de:		
	Pho	one Number:	202-	564-2108						
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Contract Number	Contract Period 01,	/01/2011 To 06/30/	/2016	Title of Work Assign	ment/SF Site Nan	ne		
EP-C-11-009	Base	Option Period Number 5	5	Sustainable	Utility M	anagement		
Contractor		Specify Section and p	paragraph of Cor	ntract SOW				
TETRA TECH, INC. Purpose:		See PWS		Period of Performan				
Work Assignment	=	Work Assignment Close-Out		Period of Performance				
Work Assignment	<u>-</u>	Incremental Funding		From 01/01/	2016 to 06	5/30/2016		
Work Plan Approv	/al			710111 017 017	2010 10 00	7/ 30/ 2010		
Work shall not commence on	this Work Assignment u	until January 1, 2016.						
Superfund	Acc	ounting and Appropriations Da	ıta		X	Non-Superfund		
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(Signature) Project Officer Name Robert Pow	ell	(Date)	20.00	Number:				
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				Branch/Mail Code: Phone Number:				
(Signature)		(Date)		FAX Number:				
Contracting Official Name Brad He	ath			Branch/Mail Code:				
5	1710	12/30/2015	Pho	ne Number: 513-	-487-2352			
	1.5			Phone Number: 513-487-2352				

PERFORMANCE WORK STATEMENT CONTRACT EP-C-11-009 WORK ASSIGNMENT 5-41

TITLE: Sustainable Utility Management Practices and Planning

WORK ASSIGNMENT CONTRACTING OFFICER'S REPRESENTATIVE (WACOR):

James Horne US EPA 1200 Pennsylvania Avenue NW Mail Code 4204M Washington, DC 20460 Phone: 202.564.0571

Fax: 202.501.2346

Email: horne.james@epa.gov

ALTERNATE WORK ASSIGNMENT CONTRACTING OFFICER'S REPRESENTATIVE (ALTERNATE WACOR):

Matt King U.S. EPA 1200 Pennsylvania Avenue NW Mail Code 4204M Washington, D.C. 20460 Phone: 202.564.2871

Fax: 202.501.2346

E-mail: king.matt@epa.gov

PERIOD OF PERFORMANCE: January 1, 2016 through June 30, 2016

ANTICIPATED LEVEL OF EFFORT (LOE): 2,200

BACKGROUND:

In September, 2010 the U.S Environmental Protection Agency issued its *Clean Water and Safe Drinking Water Infrastructure Sustainability Policy*. This Policy describes EPA's strategic directions for ensuring the sustainability of the Nation's water infrastructure, the water and wastewater systems that manage this infrastructure, and the communities served by these systems. Throughout the Policy, EPA stresses the importance of working with water and wastewater systems to help them adopt sustainable planning and operational practices to ensure long-term sustainability.

PURPOSE:

This tasking provides assistance to EPA for a variety of activities designed to help water and wastewater utilities adopt planning approaches and management practices designed to ensure the sustainability of their operations and infrastructure, consistent with the Policy described above.

TASKS:

Task 0: Prepare Contractor Work Plan

The contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), cost estimate for each task; contractor's key assumptions, on which staffing plan and budget are based; and qualifications of proposed staff. The contractor shall assure that duplication of effort relative to other ongoing work under this contract is not occurring. This task also includes regular calls with the EPA WACOR or the Alternate WACOR, as necessary, to discuss this work assignment and provide an update on progress. Any substantial changes to this tasking that would change the proposed costs by greater than 10% must be approved by the WACOR or Alternate WACOR.

Deliverables:

0.1 Work plan

The work plan shall be sent to the Contracting Officer (CO) with copies to the WACOR, Alternate WACOR, and Contract-Level Contracting Officer's Representative (CL-COR).

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- 1.1 The contractor shall develop materials based on existing EPA documents such as the *Water Infrastructure Alternatives Analysis Criteria Guide* and other relevant materials. As directed by the WACOR, the contractor shall also provide technical assistance to selected utilities to help them use these materials in various settings and prepare materials documenting the outcome of this assistance.
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- 1.4 Other materials and technical assistance to selected utilities will take place as needed based on further technical direction and a schedule developed by the WACOR

Deliverable Schedule

Task 0 Prepare Work Plan In accordance with contract requirements

Task 1 .1 Prepare draft of supplemental materials within 60 days of the tasking

Task 1 .2 Prepare final supplemental materials within 45 days of receipt of comments on the Draft materials from the EPA WACOR

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- 2.1 The contractor shall develop materials and provide necessary technical support for EPA's Sustainable *Utility Management Practices Roadmap Guide* and other relevant documents identified by the WACOR. Assistance may include:
 - Case examples
 - Revisions to the Roadmap document referenced above
 - Other materials to help utilities use the roadmap at their location or through training venues

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- Webinar and conference call support
- Other assistance identified by the WACOR

The specific assistance provided under this Task shall be provided through further technical direction from the WACOR

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- 3.1 EPA and the U.S. Department of Agriculture are working together to help small and rural utilities sustainably manage their operations. Under this task, the contractor shall develop new or revised materials and provide technical and implementation assistance for small and rural utilities as well as other technical assistance providers that also support these small utilities. Assistance may include:
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 - In-person meeting and conference support as well as webinar and conference call support
 - Other assistance identified by the WACOR

The specific assistance under this Task shall be provided based on technical direction from the EPA WACOR

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- 4.1 Since 2007, EPA and several water sector associations have collaborated to promote the use of a series of *Attributes of Effectively Managed Utilities and Keys to Management Success, or EUM.* Under this task, the contractor shall provide support to EPA's work under the EUM initiative based on specific technical direction. This support may include:
 - Developmental of supplemental materials to help utilities understand EUM and analyze their operations using the EUM Attributes, including the selection of appropriate performance metrics
 - Host webinars, meetings, and other discussions at national conferences to promote greater understanding and adoption of EUM

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 - Adaptation of existing sustainable planning materials to better meet the needs of small and medium-sized utilities
 - > Other support identified by the WACOR, based on consultation with WIRFC staff

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- ➤ Producing case studies that document successful efforts by utilities to become more energy efficient as well as other innovative approaches for energy efficiency such as energy performance contracts, and others
- Other activities identified by the WACOR through additional technical direction

Guidance Regarding Conferences: No single event under this Work Assignment is anticipated to exceed \$20,000. The Contractor shall immediately notify the EPA Contracting Officer, PO and WACOR of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, Seminar or training that may potentially incur \$20,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

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The purpose of this Amendment 2 is to incorporate a funding ceiling of \$179,000.00 for this Work Assignment. The contractor shall not exceed this funding ceiling without written authorization from the											
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Performance Work Statement Contract EP-C-11-009 Work Assignment 5-41 Amendment 3

TITLE: Sustainable Utility Management Practices and Planning

WORK ASSIGNMENT COR:

James Horne US EPA 1200 Pennsylvania Avenue NW Mail Code 4204M Washington, DC 20460 Phone: 202.564.0571

Phone: 202.564.057 Fax: 202.501.2346

E-mail: horne.james@epa.gov

ALTERNATE WORK ASSIGNMENT COR:

Leslie Corcelli U.S. EPA 1200 Pennsylvania Avenue NW Mail Code 4204M Washington, D.C. 20460 Phone: 202.564.3825

Phone: 202.564.3825 Fax: 202.501.2346

E-mail: corcelli.leslie@epa.gov

PERIOD OF PERFORMANCE: May 10, 2016 through June 30, 2016

BACKGROUND:

In September, 2010 the U.S Environmental Protection Agency issued its *Clean Water and Safe Drinking Water Infrastructure Sustainability Policy*. This Policy describes EPA's strategic directions for ensuring the sustainability of the Nation's water infrastructure, the water and wastewater systems that manage this infrastructure, and the communities served by these systems. Throughout the Policy, EPA stresses the importance of working with water and wastewater systems to help them adopt sustainable planning and operational practices to ensure long-term sustainability.

PURPOSE:

This tasking provides assistance to EPA for a variety of activities designed to help water and wastewater utilities adopt planning approaches and management practices designed to ensure the sustainability of their operations and infrastructure, consistent with the Policy described above.

This amendment adds Task 7 and will increase work in all other tasks. Additional work under Tasks 1-6 will be communicated through Technical Direction between the WACOR and the contractor. A meeting will be held with the contractor to discuss this additional work prior to the submission of the work plan.

TASKS:

Task 0: Prepare Contractor Work Plan

The contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), cost estimate for each task; contractor's key assumptions, on which staffing plan and budget are based; and qualifications of proposed staff. The contractor shall assure that duplication of effort relative to other ongoing work under this contract is not occurring. This task also includes regular calls with the WACOR or the Alternate WACOR, as necessary, to discuss this work assignment and provide an update on progress. Any substantial changes to this tasking that would change the proposed costs by greater than 10% must be approved by the WACOR or Alternate WACOR.

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Deliverable Schedule/Deliverable Due Date

- Task 0 Prepare Work Plan in accordance with contract requirements
- Task 1.1 Prepare draft of supplemental materials within 60 days of the tasking
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4.1 Since 2007, EPA and several water sector associations have collaborated to promote the use of a series of Attributes of Effectively Managed Utilities and Keys to Management Success, or

EUM. Under this task, the contractor shall provide support to EPA's work under the EUM initiative based on specific technical direction. This support may include:

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- ➤ Producing case studies that document successful efforts by utilities to become more energy efficient as well as other innovative approaches for energy efficiency such as energy performance contracts, and others
- > Other activities identified by the WACOR through additional technical direction

Additional task for WA 5-41

Task 7: Facilitation Support for OWM Management Retreat

The contractor shall secure meeting space for a one-day meeting retreat for OWM managers and staff for the purpose of improving internal communication and effectiveness.

The meeting date is scheduled for June 16, 2016. Meeting space shall include, but is not limited to, the rental of a room, audio-visual equipment, and sound equipment. The contractor's attendance at the meetings will be directed under other tasks in this work assignment. The location should be within walking distance from our office at the William Jefferson Clinton office building to eliminate travel costs for EPA employees. The contractor will confirm that no Federal Office space is available prior to searching other meeting locations.

Conference related purchases are not expected to exceed \$20,000 under this contract. OWM will provide an executed EPA Form 5170 in accordance with EPA's Guidelines on Conference Spending Guidelines (6/27/14) if at a later date it is determined that the conference expenses will exceed \$20,000. All additional costs must be approved by the Contracting Officer before they are incurred.

Guidance Regarding Conferences: No single event under this Work Assignment is anticipated to exceed \$20,000. The Contractor shall immediately notify the EPA Contracting Officer, CL-COR, and WACOR of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, seminar or training that may potentially incur \$20,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

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Performance Work Statement Contract EP-C-11-009 Work Assignment 5-41 **Amendment 4**

Title: Sustainable Water Utility Management Practices and Planning

Work Assignment Contracting Officer's Representative (WACOR):

James Horne **US EPA** 1200 Pennsylvania Avenue NW Mail Code 4204M Washington, DC 20460

Phone: 202.564.0571 Fax: 202.501.2346

Email: horne.james@epa.gov

Alternate Work Assignment Contracting Officer's Representative (WACOR):

Leslie Corcelli U.S. EPA 1200 Pennsylvania Avenue NW Mail Code 4204M Washington, D.C. 20460 Phone: 202.564.3825

Fax: 202.501.2346

E-mail: corcelli.leslie@epa.gov

Period of Performance: July 1, 2016 through September 30, 2016

Background:

In September, 2010 the U.S Environmental Protection Agency issued its Clean Water and Safe Drinking Water Infrastructure Sustainability Policy. This Policy describes EPA's strategic directions for ensuring the sustainability of the Nation's water infrastructure, the water and wastewater systems that manage this infrastructure, and the communities served by these systems. Throughout the Policy, EPA stresses the importance of working with water and wastewater systems to help them adopt sustainable planning and operational practices to ensure long-term sustainability.

Purpose:

This tasking provides assistance to EPA for a variety of activities designed to help water and wastewater utilities adopt planning approaches and management practices designed to ensure the sustainability of their operations and infrastructure, consistent with the Policy described above.

TASKS:

Task 0: Prepare Contractor Work Plan

The contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), cost estimate for each task; contractor's key assumptions, on which staffing plan and budget are based; and qualifications of proposed staff. The contractor shall assure that duplication of effort relative to other ongoing work under this contract is not occurring. This task also includes regular calls with the EPA Work Assignment Contracting Officer's Representative (WACOR) or the Alternate Work Assignment Contracting Officer's Representative (Alternate WACOR), as necessary, to discuss this work assignment and provide an update on progress. Any substantial changes to this tasking that would change the proposed costs by greater than 10% must be approved by the WACOR or Alternate WACOR.

Deliverables:

0.1 Work plan

The work plan shall be sent to the Contracting Officer (CO) with copies to the WACOR, Alternate WACOR and Contract Level COR.

0.2 Regular calls, as necessary, with WACOR and/or Alternate WACOR.

Task 1: Effective Utility Management Initiative

- 4.1 Since 2007, EPA and several water sector associations have collaborated to promote the use of a series of Attributes of Effectively Managed Utilities and Keys to Management Success, or EUM. Under this task, the contractor shall provide support to EPA's work under the EUM initiative based on specific technical direction. This support may include:
 - Developmental of written and electronic supplemental materials to help utilities understand EUM and analyze their operations using the EUM Attributes, including the selection of appropriate performance metrics based on the existing EUM Primer
 - Case examples highlighting the successful use of the EUM framework by utilities
 - Host webinars, meetings, and other discussions at national conferences to promote greater understanding and adoption of EUM and other related initiatives
 - Supporting efforts by higher capacity utilities to help lower capacity utilities effectively manage their operations using EUM and other approaches

Task 2: Financially Sustainable Utilities

5.1 In early 2015, EPA established the Water Infrastructure Resiliency Finance Center (WIRFC). The objective of the WIRFC is facilitate the adoption of sustainable financing strategies for utilities through information sharing, technical assistance and outreach. The WIRFC also works closely with technical assistance providers like the EPA Environmental Finance Centers. Based on further technical direction from the WACOR, support under this task would support the WIRFC mission through:

- Materials to help utilities identify their most important infrastructure or operational needs, as well as potential funding sources
- Adaptation of existing sustainable planning materials to better meet the needs of small and medium-sized utilities

Conference related purchases are not expected to exceed \$20,000 under this contract. OWM will provide an executed EPA Form 5170 in accordance with EPA's Guidelines on Conference Spending Guidelines (6/27/14) if at a later date it is determined that the conference expenses will exceed \$20,000. All additional costs must be approved by the Contracting Officer before they are incurred.

Deliverables and Schedule: The contractor shall provide support to EPA by providing a draft of the requested materials per the schedule provided with technical direction from the WACOR. A final version of the requested materials shall be provided within two weeks of receiving comments from the WACOR on the draft materials.

Guidance Regarding Conferences: No single event under this Work Assignment is anticipated to exceed \$20,000. The Contractor shall immediately notify the EPA Contracting Officer, Contract-Level Contracting Officer's Representative (CL-COR) and WACOR of any anticipated event involving support for a meeting, conference, workshop, symposium, retreat, Seminar or training that may potentially incur \$20,000 or more in cost during performance. Conference expenses are all direct and indirect costs paid by the government and include any associated authorized travel and per diem expenses, room charges for official business, audiovisual use, light refreshments, registration fees, ground transportation and other expenses as defined by the Federal Travel Regulations. All outlays for conference preparation should be included, but the federal employee time for conference preparation should not be included. After notifying EPA of the potential to reach this threshold, the Contractor shall not proceed with the task(s) until authorized to do so by the Contracting Officer.

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PERFORMANCE WORK STATEMENT CONTRACT EP-C-11-009 WORK ASSIGNMENT 5-45

Title: Support for Green Infrastructure Program

Work Assignment Contracting Officer's

Representative Manager (WACOR): Jamie Piziali

Permits Division

Office of Wastewater Management U.S. Environmental Protection Agency

Washington, D.C. 20004

202-564-1709 202-564-6392 fax piziali.jamie@epa.govv

Alternate WACOR: Katelyn Lynch

Permits Division

Office of Wastewater Management U.S. Environmental Protection Agency

Washington, D.C. 20004

202-564-2740 202-564-6392 fax lynch.katelyn@epa.gov

Period of Performance: January 1, 2016 through June 30, 2016

Objective:

The tasks identified below will facilitate the adoption of practical and cost-effective green infrastructure practices at the local level by providing training and outreach as well as customized technical support to communities. This support is authorized under Section 3.0 of the contract performance work statement: Technical and Administrative Program Support, as well as 1.0 National Program Development and Oversight and 5.0 Outreach and 6.0 Support for Meetings, Workshops, Conferences, and Webcasts.

Purpose:

Municipalities are increasingly interested in green infrastructure to supplement single-purpose "gray" stormwater infrastructure. Green infrastructure manages stormwater by preserving natural features, mimicking natural processes, and providing multiple environmental and social benefits. EPA encourages the use of green infrastructure in National Pollutant Discharge Elimination System (NPDES) permits and enforcement agreements. EPA's outreach and technical assistance has increased awareness of the function and benefits of green infrastructure. However, a range of institutional and technical barriers still limit the integration of these approaches into municipal

stormwater programs. The green infrastructure program will continue to provide outreach and technical assistance to address these barriers and demonstrate the environmental benefits that green infrastructure can provide.

Tasks:

TASK 1. Green Infrastructure Technical Assistance Program

Since 2012 EPA has provided technical assistance in communities to advance the national knowledge base on green infrastructure and protect water quality. Selected communities receive assistance with a range of projects aimed at addressing common barriers to green infrastructure, including code review, green infrastructure design, and cost-benefit assessments. Final reports and associated materials (fact sheets, infographics, and related documents) are developed for EPA to support a national audience. The contractor shall keep the WACOR apprised of any schedule changes and share tracking materials with WACOR.

Task 1A: 2012 Green Infrastructure Technical Assistance Program

This task is a continuation of work initiated during earlier Option Periods. In July 2012, EPA selected 17 communities in 16 states to receive targeted technical assistance to advance the implementation of green infrastructure. Technical assistance projects were based on each community's letter of interest, and included code and ordinance review, design guidance, and cost-benefit assessment. While all draft reports are complete, approximately 5 (Cape Cod Commission; Seattle, WA; Sanford, ME; Pittsburgh, PA; Omaha, NE) reports are waiting to be finalized. Once EPA reviews these reports, the contractor shall complete any edits requested by EPA. All final reports shall be 508 compliant and all final products must be written to benefit a national audience.

DELIVERABLES:

• The contractor will create 508 compliant final reports and any associated materials for the remaining projects after receiving final EPA comments describing the findings of the 2012 technical assistance projects in final reports. This Task may include finalizing materials on additional (assume 1-2) 2012 projects as requested by WACOR.

TASK 1B: 2013 Green Infrastructure Technical Assistance Program

This task is a continuation of work initiated during earlier Option Periods. In October 2013, EPA selected 5 additional communities to receive targeted technical assistance to advance the implementation of green infrastructure. Technical assistance projects are based on each community's letter of interest, and include development of conceptual designs, development of a design manual, and development of runoff reduction targets. Technical assistance projects were based on each community's letter of interest, and included code and ordinance review, design guidance, and cost-benefit assessment. While all draft reports are complete, approximately 4 reports are waiting to be finalized (Southeast Michigan Council of Governments; Gary, IN; Lincoln, NE; and Pima County, AZ). Once EPA reviews these reports, the contractor shall

complete any edits requested by EPA. All final reports shall be 508 compliant and all final products must be written to benefit a national audience.

DELIVERABLES:

• For each draft report, final reports shall be completed within 14 business days of receipt of final comments from EPA, unless another timeframe is specified by WACOR.

TASK 1C: 2014 Green Infrastructure Technical Assistance Program

This task is a continuation of work initiated during earlier Option Periods. In April 2014, EPA selected 14 additional communities to receive targeted technical assistance to advance the implementation of green infrastructure. Technical assistance projects are based on each community's letter of interest, and include development of conceptual designs, development of an operations and maintenance plan, and development of an offsite mitigation plan. While all draft reports are complete, approximately 8 reports are waiting to be finalized (Bath, ME; Fall River, MA; Buffalo, NY; Scranton, PA; Pueblo de Cochiti, NM; Albuquerque, NM; Iowa City, IA; Denver, CO). Once EPA reviews these reports, the contractor shall complete any edits requested by EPA. All final reports shall be 508 compliant and **all final products must be written to benefit a national audience.**

DELIVERABLES:

• For each draft report, final reports shall be completed within 14 business days of receipt of final comments from EPA, unless another timeframe is specified by WACOR.

TASK 1D: New Green Infrastructure Technical Assistance

EPA started a collaboration between the Office of Water, Office of Air and Radiation (OAR), and Office of Research and Development (ORD) to analyze the measurable co-benefits of green infrastructure for air quality in the Kansas City region (KS/MO). OAR and ORD are running Community Multi-scale Air Quality (CMAQ model) on land use cover data and will produce a technical memo summarizing results of CMAQ model runs: http://www2.epa.gov/air-research/community-multi-scale-air-quality-cmaq-modeling-system-air-quality-management. OAR is using the AVERT tool (www.epa.gov/AVERT) to create a technical memo summarizing AVERT emissions reduction results due to energy efficiency resulting from green infrastructure (i.e., green roofs and/or reduced stormwater pumping and treatment at wastewater treatment plants). The contractor will work with EPA to help interpret results from modeling and tools and create a final report helpful to a national audience on co-benefits of green infrastructure and impacts on air quality. All final reports shall be 508 compliant and all final products must be written to benefit a national audience.

DELIVERABLES:

- The contractor will participate in any necessary conference calls with EPA to discuss the results of research and modeling and then develop an outline of a final report for review by EPA within 2.5 weeks of the conference call. (Assume 1-3 calls)
- After EPA provides comments on the outline the contractor will develop a draft report within 16 business days.

• For each draft report, final reports shall be completed within 14 business days of receipt of final comments from EPA.

TASK 1E: Climate Resiliency Charrettes

This task is a continuation of work initiated during earlier Option Periods. The contractor completed 4 green infrastructure design charrettes in 2015 that focused on increasing climate resiliency with green infrastructure in Grand Rapids, MI; New Orleans, LA; Los Angeles, CA; and Albuquerque, NM. The contractor will finalize a summary report featuring all charrettes that will be helpful to communities throughout the nation facing similar concerns. Final reports and associated materials (fact sheets, infographics, and related documents) are developed for EPA to support a national audience. All final reports shall be 508 compliant and all final products must be written to benefit a national audience.

DELIVERABLES:

- For each draft report, final reports shall be completed within 14 business days of receipt of final comments from EPA, unless a longer timeframe is specified by the WACOR.
- Contractor will finalize associated materials from the charrettes for use by other communities.

TASK 2. Training and Outreach

TASK 2A: Case Studies, Fact Sheets, Newsletters, Compendiums, and General Reports

The contractor shall provide support for the development and formatting of case studies, fact sheets, newsletters, compendiums and general reports related to the design, implementation, and maintenance of green infrastructure practices and programs. This support may also include additional materials related to the green infrastructure technical assistance program, and further synthesis of those reports for ease of use. EPA anticipates developing 3-4 outreach documents addressing the implementation of green infrastructure approaches in different contexts. Draft documents shall be provided to EPA for comment and revised by the contractor according to the comments received. For each draft document, final documents shall be completed within 14 business days of receipt of final comments from EPA. All final documents shall be 508 compliant.

DELIVERABLES:

• EPA expects to develop approximately 3-4 outreach documents addressing the implementation of green infrastructure approaches in different contexts.

TASK 2B: Webcast Archives

The contractor shall provide support in archiving approximately 4 webinars for our website addressing the implementation of green infrastructure. The contractor shall convert presentation materials into 508-compliant materials suitable for posting on EPA's website. This also includes providing a transcript of materials.

DELIVERABLES:

• Approximately 4 webcast presentations and associated materials formatted for 508 compliance and posting on the web within 2 weeks of receiving materials.

TASK 3. Website Support

The contractor shall provide technical support in maintaining and developing the green infrastructure website. The contractor shall provide support in developing new content or web pages as requested via technical direction by the EPA WACOR. The support may include, but is not limited to, writing introductory content, editing existing content, reviewing content, identifying links, preparing new material, providing recommendations to reorganize content, development of new professional graphics, social media graphics, videos, logos, and other graphic-intensive materials such as infographics. EPA anticipates submitting 3-5 requests.

When creating content for the Green Infrastructure website, the contractor shall adhere to EPA Style Guide and OneEPA Web guidelines including the following:

- Content and publications added to the website must be compliant with Agency standards, including 508 accessibility, metadata standards, and other published EPA Agency standards and requirements.
- Use of the current framework and structure of the website, until EPA provides a new template to be implemented.
- Multimedia image files that accompany text shall be produced and/or published using the OneEPA Web guidelines current format (.gif, .jpg (or .jpeg), .png) and vector files will also be delivered when created.
- New video files shall be compressed to EPA's current format (.mp4, .flv, .swf) or to new video format requirements as they become available, currently EPA uses YouTube formatting (http://www.youtube.com/user/USEPAgov).

DELIVERABLES:

- The contractor shall respond to requests from the EPA WACOR for support of new, edited or revised content within 3 business days either with a written response or if requested, a level of effort to complete the request.
- A draft of fact Sheets/infographics/logos/social media graphics and other similar items requested will be delivered within 7 business days of the request. If the contractor has questions regarding any graphics/photographs, they should communicate directly with the WACOR before submitting a draft. If EPA requests additional edited drafts, the contractor will deliver within 3 business days, unless a longer period is specified by WACOR. After EPA sends final comments the contractor will deliver a final version of the document within 1 week. The contractor must ensure they have EPA approval before making final 508 compliant version of graphics/documents.
- For more significant reorganizations or development of new professional graphics, social media graphics, videos logos, and other graphic-intensive materials such as infographics, a draft must be provided for review within 7 business days of receiving technical direction. If the Contractor has questions regarding any graphics/photographs, they should communicate directly with the WACOR before submitting a draft. The contractor will then create a final version within 1 week and ensure they have EPA approval before making final 508 compliant version of graphics/documents.

TASK 4: Quality Assurance Project Plan (QAPP)

All environmental data used in decision making shall be supported by an approved Quality Assurance Project Plan (QAPP). A QAPP for the tasks included in this PWS was developed under a previous Work Assignment. The Contractor shall update this QAPP as needed.

DELIVERABLES:

• Contractor will confirm with updated QAPP memo within 30 days of work plan acceptance. Updates to the QAPP as needed, or requested by the EPA WACOR.

Quality Assurance:

This work will reference and use the contract Quality Assurance Surveillance Plan (QASP).

Estimated Level of Effort:

EPA estimates a total of **3,400 LOE** hours to complete these tasks.

Reporting Requirements:

The Contractor shall provide the WACOR with a breakdown of dollars spent on individual projects on a quarterly basis at a minimum and when requested by WACOR.

Guidance Regarding Conferences:

The contractor shall immediately alert the EPA WACOR to any anticipated event under the work assignment which may result in incurring an estimated \$20,000 or more cost, funded by EPA, specific to that event, meeting, training, etc. Those costs would include travel of both prime and consultant personnel, planning and facilitation costs, AV and rental of venue costs, etc. The EPA WACOR will then prepare approval internal paperwork for the event and will advise the contractor when appropriate signatures have been obtained. At that point, effort can proceed for the event. If the event is being sponsored by another EPA organization, the organization providing the planning is responsible for the approval.

Guidance Regarding Writing for EPA:

EPA products are to conform to EPA standards. Please reference EPA Stylebook http://www2.epa.gov/stylebook. Note also that EPA utilizes AP Style first (http://www.apstylebook.com) and U.S. Government Printing Office Style Manual second (http://www.gpo.gov/fdsys/search/pagedetails.action?granuleId=&packageId=GPO-STYLEMANUAL-2008&fromBrowse=true)

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